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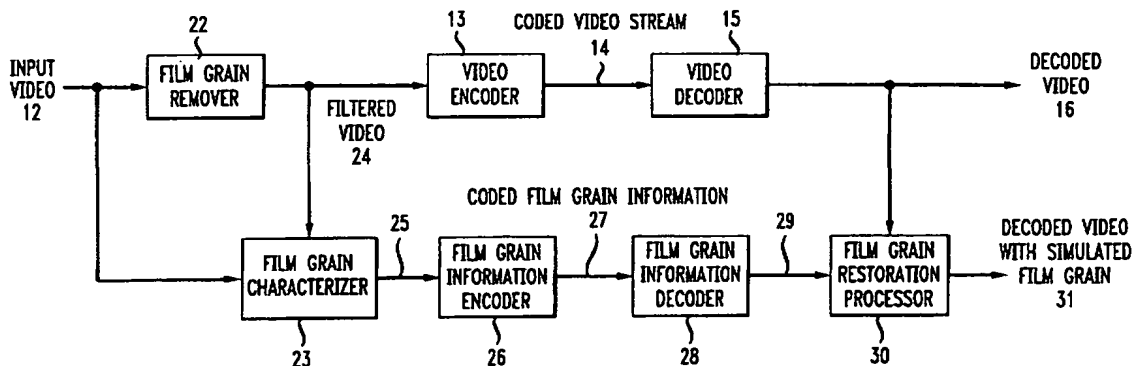
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(54) Title: METHOD AND APPARATUS FOR REPRESENTING IMAGE GRANULARITY BY ONE OR MORE PARAMETERS



(57) Abstract: To simulate film grain in a compressed video signal, a decoder (15, 28) receives a message containing information that contains a set of one or more parameters, each specifying certain attribute associated with the film grain. For example, one of the parameters will specify the model used to simulate the film grain, whereas other parameters each specify a particular factor associated with that model. Upon receipt of the message, the decoder selects the model, and simulates the film grain for addition to the video signal following decompression.

# INTERNATIONAL SEARCH REPORT

onal Application No  
PCT/US2004/009866

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 G06T9/00 H04N5/262

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G06T H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, IBM-TDB

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 641 596 A (COK DAVID R ET AL) 24 June 1997 (1997-06-24)	1-4, 9, 10, 14, 15, 18-20
A	abstract; figures 2, 3 column 6, line 19 - line 67  ----- -/--	5-8, 11-13, 16, 17, 21, 22

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>CAMPISI P ET AL: "Signal-dependent film grain noise generation using homomorphic adaptive filtering"            IEEE PROCEEDINGS: VISION, IMAGE AND SIGNAL PROCESSING, INSTITUTION OF ELECTRICAL ENGINEERS, GB,            vol. 147, no. 3,            23 June 2000 (2000-06-23), pages 283-287,            XP006014574            ISSN: 1350-245X            the whole document</p>	1-22
A	<p>JACKY CHUN KIT YAN ET AL:            "Signal-dependent film grain noise removal and generation based on higher-order statistics"            HIGHER-ORDER STATISTICS, 1997.,            PROCEEDINGS OF THE IEEE SIGNAL PROCESSING WORKSHOP ON BANFF, ALTA., CANADA 21-23 JULY 1997, LOS ALAMITOS, CA, USA,IEEE COMPUT. SOC, US,            21 July 1997 (1997-07-21), pages 77-81,            XP010239820            ISBN: 0-8186-8005-9            the whole document</p>	1-22
A	<p>WO 02/33958 A (EASTMAN KODAK CO)            25 April 2002 (2002-04-25)            abstract; figures 7,13            page 2, line 28 - page 3, line 4            page 4, line 23 - line 26            page 5, line 5 - line 24            page 11, line 6 - page 12, line 10            page 14, line 17 - line 19            page 19, line 28 - page 20, line 28            page 21, line 5 - page 23, line 11            page 25, line 6 - page 27, line 29            page 35, line 11 - page 36, line 6</p>	1-22
A	<p>US 2002/034337 A1 (SHEKTER JONATHAN MARTIN) 21 March 2002 (2002-03-21)            abstract; figures 1,8            paragraph '0072!</p>	1-22
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

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